WTC Proposed Sampling Program

Success Requires Restructuring of Program Objectives and Sampling Methodology

Revised Objective One:

 To estimate the geographic extent of remaining WTC contaminants of potential concern (COPC) resulting from the building collapse plume by sampling residential and non-residential buildings in lower Manhattan and a portion of Brooklyn. [that agree to participate], [and to provide a cleanup when appropriate].

Revised Objective Two:

- To relate results of <u>base the</u> sampling on building [cleaning history], construction <u>type</u>
- To relate results of <u>base the</u> sampling on central heating, ventilation, and air <u>conditioning (HVAC) [if the information</u> <u>collected will support such an analysis]</u>
 - Comment: These are constraints that need to be built into sampling design if results are to be interpretable. Cleaned buildings should not be re-sampled in Phase I.

Actions From Objective 1 & 2:

- In Phase I (Pre-test) any units (the specific units tested, not the entire building) with elevated COPC will be cleaned, without regard to the presence of a WTC Dust Signature.
 - Comments: This will encourage maximum participation in Phase I, limit self-selection bias and thereby, providing the necessary data for future policy determinations.
 - No one will agree to testing, unless we guarantee cleanup. Ex. finding lead above the health based benchmark, and then not cleaning because the WTC dust signature was absent, will make that unit un-rentable or un-sellable

Revised Objective Three:

- (4) To validate a screening method to identify WTC dust.
 - Comment: this will provide necessary data to inform policy deliberations for further testing/cleanup in Phases II and III. This objective is moved to #3 because it occurs during Phase I but <u>before</u> Phase II and III

Revised Objective Four:

- After policy deliberation, results of Phase I will be used to determine if a <u>Phase II</u> cleaning should proceed. Phase II will test for the presence of collapse residues in additional units within the <u>same</u> geographic area as Phase I.
 - Comments: We split original objective #3 into two objectives (#4 and #5) to allow for clearer policy discussion.
 - Designed to determine whether further sampling is necessary in this already sampled geographic area. Perhaps, cleaning of like units would be offered and could proceed without sampling.

Revised Objective Five:

- After policy deliberation, results of <u>Phase I</u> will be used to determine if a <u>Phase III</u> sampling/cleaning should proceed. Phase III would test for the presence of collapse residues in <u>areas beyond the boundaries of</u> <u>the areas</u> currently tested in Phase I.
 - Comments: This would require sampling before cleaning as these areas were never sampled.
 - This phase would only be necessary if Phase I samples show persistent high levels at the boundaries of the current neographic borders

Statistical Sampling Model

- The proposed sampling model (Spatially Balanced Sampling by Stevens & Olsen; 2004) is inappropriate for this analysis because the WTC area has "distinct natural units" and cannot be viewed as the "infinite point set" required by the model.
- <u>Comment:</u> A sampling sub-committee should be rapidly selected consisting of technical panel reps (including the community reps), statisticians and environmental sampling experts